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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,732	10/29/2003	Cheng-Liang Hou	58268.00324	2651
32294 7590 06/18/2008 SQUIRE, SANDERS & DEMPSEY L.L.P. 8000 TOWERS CRESCENT DRIVE 14TH FLOOR VIENNA, VA 22182-6212			EXAMINER JAIN, RAJ K	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 06/18/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/694,732

**Applicant(s)**

HOU, CHENG-LIANG

**Examiner**

RAJ K. JAIN

**Art Unit**

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5, 6, 8-10, 13, 15, 16, 17, 20 and 21 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Marin et al (USP 5,936,940).

Regarding claims 1, 8, 9 and 16, Marin discloses a method and system and computer readable medium (see abstract), comprising:

incrementing a port transmission rate using a variable resolution (Figs. 1, 5 & 6, col 9 line 9 – col 10 line 47.); and

transmitting data through the port using the incremented port transmission rate (Figs 1, 4-6, col 11 line 25 – col 12 line 27).

Regarding claims 2, 10 and 17, Marin discloses the resolution is a function of the rate (Figs. 6.).

Regarding claims 5, 13 and 20, the resolution is a function of segmented rate ranges (see Fig. 6).

Regarding claims 6, 14 and 21, (see Fig. 5) resolution is 64 Kbps in a first range (region 1), 1 Mbps in a second range, and 8 Mbps in a third range (regions Ln-2, Ln-3).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 4, 11, 12, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marin et al (USP 6,219,343 B1) in view Honkasalo et al (USP 6,219,343 B1).

Marin fails to disclose resolution inversely proportional to the rate, and/or resolution decrease exponentially as the rate increases.

Honkasalo discloses the resolution is inversely proportional to the rate (see col 3 lines 15-25.) and the resolution decreases exponentially as the rate increases (col 7 lines 25-40, as data rate increases the resolution decreases based on a given transmission power and therefore lower Eb/No values and more interference respectively). Variable rate changes allows for an efficient data rate services without depletion of resources. Thus it would have been obvious at the time the invention was made to incorporate the teachings of Honkasalo within Marin so as to improve network efficiency by allocating different data rates to services as required.

Claims 7, 15 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marin et al (USP 6,219,343 B1) in view of Miao (US 2004/0017306A1)

Marin discloses segmented data rates, however, Marin fails to disclose segmented data rates in range above 2Mbps to 1000Mbps.

Miao discloses segmented data rates in range above 2Mbps to 1000Mbps, (see Fig. 6, paras 35-37, the Mux 132 produces on of several data in range from 50Mbps to 1 Gbps.). The inclusion of an scalable high speed data rate converter allows for multiple sources of data reception of various resolutions and magnitude including audio, video, HD video, high speed data transference, etc..

Thus it would have been obvious at the time the invention was made to incorporate the teachings of Miao within Marin so to improve network capabilities by allowing for multiple input sources of differing magnitude to be incorporated in a network as desired.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAJ K. JAIN whose telephone number is (571)272-3145. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2616

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

***/Raj K. Jain/***

*Primary Examiner, Art Unit 2616*

June 17, 2008